

## SEQUENCE LISTING



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<120> PEPTIDES FOR INDUCING APOPTOSIS IN TUMOR CELLS

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 <141> 2005-03-15

<150> PCT/EP03/06958  
 <151> 2003-07-01

<150> EP 02014074.5  
 <151> 2002-07-01

<160> 133

<170> PatentIn version 3.3

<210> 1  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 1  
 Trp Leu Gly Thr Phe Ser Gly Thr Cys Ser Thr Ala Phe Tyr Phe Pro  
 1                      5                      10                      15

Leu Gly Val Pro  
                     20

<210> 2  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 2  
 Cys Arg Trp Leu Arg Thr Lys Arg Thr Leu Pro Leu Phe Ser Val Met  
 1                      5                      10                      15

Pro Phe Trp Cys  
                     20

<210> 3  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 3  
 Met Tyr Ser Asn Val Ser Val Asp Val Ala Ala Asp Gly Val Ser Cys  
 1 5 10 15

Val Cys Cys Ser Trp Ser Val Gln Asn Asp Arg Pro Asp Ser Gly  
 20 25 30

<210> 4  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 4  
 Tyr Lys Trp Arg Met Gly Val Tyr Leu Ser Gly Val Arg Leu Met Arg  
 1 5 10 15

Ala Phe Ile Ile  
 20

<210> 5  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 5  
 Val Ser Tyr Arg Thr Cys Thr Ala Gly Gly Gln Met Ser Arg Trp Arg  
 1 5 10 15

Leu Phe Ile Ile  
 20

<210> 6  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 6  
 Gly Tyr Ser Leu Thr Ser Met Ser Ala Phe Ala Val Arg Pro Cys Val  
 1 5 10 15

Cys Gly Ser Leu  
 20

<210> 7  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 7  
 Trp Leu Gly Thr Phe Ser Gly Thr Cys Ser Thr Ala Phe Tyr Phe Pro  
 1 5 10 15

Leu Gly Val Pro  
 20

<210> 8  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 8  
 Thr Asn Phe Arg Pro Ser Pro Thr Phe His Ala Ile Leu Leu Trp Pro  
 1 5 10 15

Asn Thr Phe Ser  
 20

<210> 9  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 9

Val	Gly	Leu	Gly	Gly	Trp	Cys	Phe	Asp	Cys	Tyr	Trp	Val	Ala	Trp	Asp
1				5					10					15	

Phe	Gln	Thr	Gln
			20

<210> 10

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 10

Phe	Trp	Asp	Tyr	Cys	Gly	Pro	Leu	Ile	Cys	Leu	His	Cys	Asn	Leu	Gly
1				5					10					15	

Arg	Cys	Val	Ser
			20

<210> 11

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 11

Met	Met	Asp	Ser	Ala
1				5

<210> 12

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 12

Ala	Ser	Leu	Arg	Leu	Tyr	Pro	Ile	Gly	Gly	Thr	Val	Pro	Phe	Gly	Arg
1				5					10					15	

Thr Gly Ala Gly  
20

<210> 13  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 13  
Gly Asp Tyr Gly Cys Cys Trp Val Val Thr Thr Gly Val Gly Val Arg  
1 5 10 15

Cys Tyr Val Trp  
20

<210> 14  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 14  
Ala Cys Trp Ala Leu Trp Ser Leu Phe Arg Gln Asp Leu Leu Leu Val  
1 5 10 15

Ile Thr Phe Asp  
20

<210> 15  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 15  
Asp Ser Ala Pro Gly Glu Arg Tyr Phe Val Asp Phe Leu Gly Val Ser  
1 5 10 15

Phe Ala Cys Val Trp Ser Val Gln Asn Asp Arg Pro Asp Ser Gly  
20 25 30

<210> 16  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 16  
 Ile Pro Trp Ala Pro Pro Met Tyr Phe Ala Asp Ser Asn Val  
 1 5 10

<210> 17  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 17  
 Thr Pro Ser Cys Arg Ala Gly Val Leu Arg Cys Thr Gly Cys Phe Gly  
 1 5 10 15

Val Arg Ser Gly  
 20

<210> 18  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 18  
 Leu Trp Arg Cys Arg Thr Val Ser Ala Tyr Leu Ser Trp Leu Arg His  
 1 5 10 15

Tyr Ser Ser Ser  
 20

<210> 19  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 19

His Ser Arg Pro Ala Leu Cys Met Val Ser Leu Arg Trp Ala Arg Ser  
1 5 10 15

Leu Trp Ile Val  
20

<210> 20

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 20

Trp Thr His Val Trp Val Gly Trp Leu Val Ala Gly Met Ser  
1 5 10

<210> 21

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 21

Arg Phe Arg Cys Arg Ala Asp Leu Cys Val Thr Leu Thr Val Leu Ser  
1 5 10 15

Phe Leu Ala Gln  
20

<210> 22

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 22

Cys Leu Glu Thr Leu Arg Val Cys Pro Tyr Val Ala Arg Ile Ala Ile  
1 5 10 15

Gln His Leu Arg  
20

<210> 23  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 23  
Leu Leu Ala Trp Arg Val Gln Gln Ser Arg Pro Leu Pro Tyr Leu His  
1 5 10 15

Ile Ala Phe Ile  
20

<210> 24  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 24  
Pro Pro Pro Leu Thr Gly Arg Trp Ser Arg Gln Cys Val Ser Val Phe  
1 5 10 15

Gly Ile Val His  
20

<210> 25  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 25  
Cys Trp Ile His Arg Ala Trp Met Leu Ser Trp His Gly Val Trp Ser  
1 5 10 15

Leu Thr Leu Val  
20



<210> 26  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 26  
 Ala Pro Pro Ile Ser Gly Arg Trp Arg Gly Leu Tyr Met Arg Ser Arg  
 1 5 10 15

Phe Val Ser Leu  
 20

<210> 27  
 <211> 18  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 27  
 Val Arg Leu Phe Ile Val Cys Ile Ile Ile Cys Cys Leu Met Leu Leu  
 1 5 10 15

Val Gly

<210> 28  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 28  
 Ile Pro Ser Cys Ser Val Leu Val Cys Leu Cys His Leu Ala Arg Leu  
 1 5 10 15

Trp His Cys Glu  
 20

10

<210> 29  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 29  
Cys Ser Val Met His Val Phe Arg Val Gly Pro Gly Ser Ser Gly Ser  
1 5 10 15

Leu Ser Cys Gly  
20

<210> 30  
<211> 42  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 30  
Arg Ala Thr Tyr Trp Phe Arg Ser Arg Tyr Gln Val Val His Arg Ser  
1 5 10 15

Arg Leu Pro Tyr Gly Pro Leu Ile Val Val Gly Ile Gly Ala Leu Asn  
20 25 30

Leu Glu Leu Asn Arg Thr Leu Leu Cys Ser  
35 40

<210> 31  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 31  
Ser Leu Ala Ile Trp Ser Thr Gln Ser Cys Ala Arg Cys Gln Cys Thr  
1 5 10 15

Leu Ser Arg Val  
20

<210> 32  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 32  
 Phe Trp Phe Leu Pro Ala Pro Pro Cys Lys Cys Gly Leu Leu Tyr Arg  
 1 5 10 15

Leu Ser Val His  
 20

<210> 33  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 33  
 Leu Ala Gly Arg His Phe Ser Arg Val Val Asp Arg Ile Arg Tyr Arg  
 1 5 10 15

Leu Leu Trp Thr  
 20

<210> 34  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 34  
 Met Pro Ile Pro Pro Leu Cys Arg Ser Ala Gly Arg Leu Leu Tyr Leu  
 1 5 10 15

Tyr Thr His Tyr  
 20

<210> 35  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 35

Tyr Thr Leu Pro Ser Val Leu Leu Cys Leu Met Arg Thr Gly Met Leu  
1 5 10 15

Arg Cys Ala Cys  
20

<210> 36

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<221> MOD\_RES

<222> (18)

<223> Variable amino acid

<400> 36

Gly Met Pro Ile Arg Ala Ser Pro Cys Tyr Leu Gly Val Asp Gly Trp  
1 5 10 15

Cys Xaa Thr Leu  
20

<210> 37

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 37

Lys Pro Trp Glu Tyr Leu Arg Met Phe Pro Trp Met Arg Val Ala Arg  
1 5 10 15

Phe Phe Ile Trp  
20

<210> 38  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 38  
 Ala Leu Leu Met Phe Gly Cys Pro Asn Trp Phe Ala Ser Trp Arg Leu  
 1 5 10 15

His Leu Phe Ile  
 20

<210> 39  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 39  
 Glu Phe Gly Ser Gly Leu Val Ser Gly Arg Gly Ile Ile Val Arg Arg  
 1 5 10 15

Met Leu Phe Leu Arg Val Leu Leu Trp Val Leu Arg Ser Ala Glu Ile  
 20 25 30

Tyr Glu Ser  
 35

<210> 40  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 40  
 Gly Pro Phe Glu Asn Trp Arg Val Glu Glu Leu Ala Arg Gly Arg Tyr  
 1 5 10 15

Arg Met His Gly Asp Val Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

<210> 41  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 41  
 Gly Pro Ile Asp Cys Ile Ile Phe Leu Leu Trp Tyr Ser Arg Gln Gln  
 1 5 10 15

Arg Gly Gly Ser Arg Gly Gly Pro  
 20

<210> 42  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 42  
 Gly Ser Arg Phe Arg Val Phe Val Cys Ser Leu Phe Ser Phe Leu Ser  
 1 5 10 15

Gly Arg Gly Gly Gly Val Val Val Leu Arg Ser Ala Glu Ile Tyr Glu  
 20 25 30

Ser

<210> 43  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 43  
 Gly Pro Phe Lys Arg Cys His Glu Arg Leu Val Ala Phe Ala Arg Cys  
 1 5 10 15

Trp Phe Met Trp Ser Met Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

<210> 44  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 44  
 Gly Pro Ser Asn Asp Asn Gln Leu Val Leu Arg Val Arg Ile Leu Arg  
 1 5 10 15

Val Leu Ile Val Met Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

<210> 45  
 <211> 27  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 45  
 Glu Phe Arg Val Arg Arg Met Arg Leu Leu Val Arg Leu Met Gly Ser  
 1 5 10 15

Asp Asp Ser Gly Thr Ile Pro Asp Phe Gly Pro  
 20 25

<210> 46  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 46  
 Gly Pro Ser Leu Gln Phe Leu Glu Val Val Val Ser Cys Tyr Met Val  
 1 5 10 15

Leu Tyr Asp Leu Ser Lys Gly Pro  
 20

<210> 47  
 <211> 34  
 <212> PRT  
 <213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 47

Gly	Pro	Gln	Pro	Phe	Cys	Ser	Pro	Pro	Ser	Phe	Tyr	Thr	Arg	Leu	Leu
1				5					10					15	

Ile	Ile	Val	Arg	Leu	Leu	Ser	Leu	Asp	Leu	Gln	Arg	Ser	Ser	Asn	Arg
			20					25					30		

Arg Tyr

&lt;210&gt; 48

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 48

Gly	Pro	Ala	Pro	Leu	Ser	Leu	Cys	Val	Cys	Lys	Cys	Gly	Cys	Gly	His
1				5					10					15	

Thr	Arg	Pro	Phe	Val	Gly	Pro
				20		

&lt;210&gt; 49

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 49

Gly	Pro	Asp	Val	His	Ile	Trp	Gln	Ser	Ile	Ile	Phe	Tyr	Ala	Met	Arg
1				5					10					15	

His	Met	Met	Gly	Pro
			20	

&lt;210&gt; 50

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence



&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 50

Glu Phe Gly Ser Gly Cys Gly Cys Phe Val Arg Gly Arg Ile Val Arg  
 1 5 10 15

Ile Arg Cys Val Ile Leu Leu Leu Arg Val Leu Arg Ser Ala Glu Ile  
 20 25 30

Tyr Glu Ser  
 35

&lt;210&gt; 51

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 51

Gly Pro His Ser Ser Ala His Asp Arg Ile Trp Leu Arg Val Arg Gly  
 1 5 10 15

Leu Arg Ile Ile Leu Leu Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

&lt;210&gt; 52

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 52

Glu Phe Gly Ser Gly Leu Cys Val Arg Arg Trp Trp Gly Met Ser Val  
 1 5 10 15

Gly Ser Arg Ile Met Leu Val Met Leu Val Leu Arg Ser Ala Glu Ile  
 20 25 30

Tyr Glu Ser  
 35

<210> 53  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 53  
 Gly Pro Val Tyr Ser Glu Ala Phe Val Cys Leu Val Cys Ala Gly Val  
 1 5 10 15

Cys Val Glu Glu Cys Gly Gly Ser Leu Asp Leu Gln Arg Ser Ser Asn  
 20 25 30

Arg Arg Tyr  
 35

<210> 54  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 54  
 Gly Pro Ile Glu Thr Val Gly Phe Ile Val Arg Leu His Thr Leu Leu  
 1 5 10 15

Met Val Leu Arg Arg Thr Gly Pro  
 20

<210> 55  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 55  
 Gly Pro Leu His Arg Thr Leu Leu Val Asp Met Cys Cys Trp Leu Met  
 1 5 10 15

Ser Leu Glu Ser Asn Met Gly Pro  
 20

<210> 56  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 56  
 Glu Phe Gly Val Arg Val Val Cys Val Val Arg Ser Leu Phe Val Leu  
 1 5 10 15

Arg Cys Gly Leu Leu Arg Cys Arg Gly Val Leu Arg Ser Ala Glu Ile  
 20 25 30

Tyr Glu Ser  
 35

<210> 57  
 <211> 34  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 57  
 Glu Phe Val Arg Glu Cys Ser Leu Cys Arg Val Met Val Leu Met Phe  
 1 5 10 15

Val Leu Arg Gly Ile Arg Leu Arg Val Leu Arg Ser Ala Glu Ile Tyr  
 20 25 30

Glu Ser

<210> 58  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 58  
 Glu Phe Gly Val Arg Leu Leu Val Leu Leu Arg Leu Arg Cys Val Arg  
 1 5 10 15

20

Arg Gly Gly Gly Cys Phe Val Cys Trp Val Leu Arg Ser Ala Glu Ile  
20 25 30

Tyr Glu Ser  
35

<210> 59  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 59  
Gly Ser Gly Phe Arg Met Arg Val Leu Val Met Val Cys Arg Leu Arg  
1 5 10 15

Val Val Phe Leu Val Arg Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu  
20 25 30

Ser

<210> 60  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 60  
Gly Arg Leu Gly Trp Leu Arg Leu Leu Cys Val Arg Ile Val Leu Val  
1 5 10 15

Cys Leu Arg Arg Gly Leu Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
20 25 30

<210> 61  
<211> 37  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

21

<400> 61

Glu Phe Gly Ser Gly Trp Tyr Val Asp Leu Gly Asp Tyr Ser Val Trp  
1 5 10 15

Val Asp Tyr Val Tyr Cys Gly Ser Gly Ser Leu Asp Leu Gln Arg Ser  
20 25 30

Ser Asn Arg Arg Tyr  
35

<210> 62

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 62

Gly Pro Ser Gln Cys Ala Gln Arg Val Ala Leu Ile Gln Met Tyr Ile  
1 5 10 15

Asp Ala Leu Val Cys Ile Gly Pro  
20

<210> 63

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<220>

<221> MOD\_RES

<222> (19)

<223> Variable amino acid

<400> 63

Glu Phe Gly Ser Gly Cys Val Arg Ile Arg Val Gly Ile Val Arg Arg  
1 5 10 15

Met Leu Xaa Leu Arg Phe Val Phe Leu Val Leu Arg Ser Ala Glu Ile  
20 25 30

Tyr Glu Ser  
35

<210> 64  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 64  
 Gly Pro Leu Leu Asp Pro Met Leu Arg Gln Arg Phe Ser Leu Arg Val  
 1 5 10 15

Trp Ile Met Leu Leu Gly Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

<210> 65  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 65  
 Gly Pro Asn Ser Trp Val Trp Arg Tyr Val Thr Ile Ala His Trp Leu  
 1 5 10 15

Ala Asn Tyr Arg Met Ser Gly Pro  
 20

<210> 66  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 66  
 Gly Pro Ala Met Lys Ser Cys Thr Ile Arg Val Phe Arg Val Cys Ile  
 1 5 10 15

Val Leu Arg Ile Val Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

&lt;210&gt; 67

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
peptide

&lt;400&gt; 67

Glu	Phe	Gly	Val	Arg	Met	Arg	Leu	Met	Ile	Arg	Ile	Phe	Arg	Gly	Leu
1					5				10					15	

Phe	Val	Leu	Arg	Gly	Phe	Arg	Gly	Leu	Val	Leu	Arg	Ser	Ala	Glu	Ile
			20					25					30		

Tyr	Glu	Ser
		35

&lt;210&gt; 68

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
peptide

&lt;400&gt; 68

Gly	Pro	Val	Pro	Ser	Ser	Pro	Cys	Ser	Phe	Leu	Leu	Tyr	Cys	Arg	Asp
1				5					10					15	

Val	Leu	Cys	His	Trp	Pro	Gly	Pro
			20				

&lt;210&gt; 69

&lt;211&gt; 26

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
peptide

&lt;400&gt; 69

Gly	Pro	Cys	Glu	Pro	Phe	Ile	Gly	Asp	Cys	Trp	Pro	Cys	Leu	Ile	Arg
1				5					10					15	

Thr	Leu	Val	Thr	Leu	Arg	Gly	Leu	Asp	Leu
			20					25	

&lt;210&gt; 70

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 70

Gly	Pro	Trp	Trp	Lys	Asp	Arg	Gly	Val	Leu	Val	Arg	Leu	Cys	Val	Leu
1				5					10					15	

Arg	Leu	Val	Val	Gly	Val	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu	Ser
			20					25					30		

&lt;210&gt; 71

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (18)

&lt;223&gt; Variable amino acid

&lt;400&gt; 71

Gly	Pro	Arg	Leu	Leu	Val	Arg	Met	Arg	Gly	Trp	Cys	Arg	Val	Ser	Leu
1				5					10					15	

Ile	Xaa	Phe	Trp	Leu	Arg	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu	Ser
				20				25					30		

&lt;210&gt; 72

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 72

Glu	Phe	Arg	Val	Arg	Ile	Ile	Val	Val	Ser	Leu	Arg	Ile	Trp	Arg	Leu
1				5					10					15	

Leu	Val	Arg	Arg	Arg	Cys	Leu	Cys	Leu	Val	Leu	Arg	Ser	Ala	Glu	Ile
						20			25				30		



Tyr Glu Ser  
35

<210> 73  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 73  
Gly Pro Val Glu Cys Ala Asp Val Leu Phe Ala Ser Arg Ile Arg Leu  
1 5 10 15

Leu Cys Leu Cys Phe Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
20 25 30

<210> 74  
<211> 34  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 74  
Glu Phe Gly Arg Arg Leu Leu Val Phe Arg Leu Ser Val Phe Val Val  
1 5 10 15

Val Leu Gly Arg Arg Leu Ser Arg Val Leu Arg Ser Ala Glu Ile Tyr  
20 25 30

Glu Ser

<210> 75  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 75  
Gly Ala Gly Leu Gly Arg Val Ile Arg Leu Arg Ile Val Val Leu Arg  
1 5 10 15

Cys Ile Phe Leu Leu Phe Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu  
           20                          25                          30

Ser

<210> 76  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           peptide

<400> 76  
 Gly Pro Phe Pro Phe Asp Tyr Pro Arg Trp Ile Met Ile Val Leu Leu  
   1                          5                          10                          15

Arg Gly Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
           20                          25

<210> 77  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           peptide

<400> 77  
 Gly Ser Arg Gly Leu Arg Leu Cys Leu Leu Gly Arg Cys Arg Leu Cys  
   1                          5                          10                          15

Gly Cys Leu Ile Ile Met Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu  
           20                          25                          30

Ser

<210> 78  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           peptide

&lt;400&gt; 78

Gly Pro Glu Ser Tyr Val Leu Trp Pro Ala Arg Gly Glu Ala Leu Tyr  
 1 5 10 15

Tyr Leu Arg Ala Trp Leu Gly Pro  
 20

&lt;210&gt; 79

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 peptide

&lt;400&gt; 79

Gly Ser Arg Cys Ile Arg Arg Arg Ile Ser Ile Leu Phe Phe Val Phe  
 1 5 10 15

Arg Val Leu Arg Ser Arg Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu  
 20 25 30

Ser

&lt;210&gt; 80

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 peptide

&lt;400&gt; 80

Gly Pro Phe Ser Glu His Ala Arg Gly His Val Val Thr Ile Cys Arg  
 1 5 10 15

Leu Arg Leu Leu Phe Trp Leu Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

&lt;210&gt; 81

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 peptide

&lt;400&gt; 81

Gly Pro Ser Ser Leu Leu Arg Arg Cys Leu Ile Leu Gly Met Val Leu  
 1 5 10 15

Gly Val Leu Arg Arg Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

&lt;210&gt; 82

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 peptide

&lt;400&gt; 82

Gly Pro His Pro Val Leu Ala Val Gln Leu Ile Asn Ala Tyr Leu Gly  
 1 5 10 15

Leu Glu Arg Val Gly Arg Gly Pro  
 20

&lt;210&gt; 83

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 peptide

&lt;400&gt; 83

Gly Pro Leu Pro Ser Gly Ala Val Ser Thr Glu Ala Tyr Phe Trp Glu  
 1 5 10 15

Val Phe Lys Leu Leu Met Gly Pro  
 20

&lt;210&gt; 84

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Synthetic  
 peptide

&lt;400&gt; 84

Gly Pro Tyr Pro Tyr Leu Arg Ile Leu Leu Val Gln Lys Ile Ala Cys  
 1 5 10 15

Val Arg Arg Ala Leu Trp Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
                   20                                  25                                  30

<210> 85  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           peptide

<400> 85  
 Gly Pro Val Gly Val Glu Gly Val Asp Ser Val Phe Gly Trp Cys Val  
 1                                  5                                  10                                  15

Val Cys Phe Leu Leu Val Trp Ser Leu Asp Leu Gln Arg Ser Ser Asn  
                   20                                  25                                  30

Arg Arg Tyr  
           35

<210> 86  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           peptide

<400> 86  
 Glu Phe Arg Val Arg Val Leu Gly Cys Met Gly Val Phe Leu Arg Leu  
 1                                  5                                  10                                  15

Arg Phe Cys Gly Gly Leu Arg Leu Arg Val Leu Arg Ser Ala Glu Ile  
                   20                                  25                                  30

Tyr Glu Ser  
           35

<210> 87  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           peptide

30

<400> 87

Gly Ser Gly Leu Val Ser Gly Arg Gly Ile Ile Val Arg Arg Met Leu  
1 5 10 15

Phe Leu Arg Val Leu Leu Trp Val Leu Arg Ser Ala Glu Ile Tyr Glu  
20 25 30

Ser

<210> 88

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 88

Gly Pro Phe Glu Asn Trp Arg Val Glu Glu Leu Ala Arg Gly Arg Tyr  
1 5 10 15

Arg Met His Gly Asp Val Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
20 25 30

<210> 89

<211> 24

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 89

Gly Pro Ile Asp Cys Ile Ile Phe Leu Leu Trp Tyr Ser Arg Gln Gln  
1 5 10 15

Arg Gly Gly Ser Arg Gly Gly Pro  
20

<210> 90

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

&lt;400&gt; 90

Gly Ser Arg Phe Arg Val Phe Val Cys Ser Leu Phe Ser Phe Leu Ser  
 1 5 10 15

Gly Arg Gly Gly Gly Val Val Val Leu Arg Ser Ala Glu Ile Tyr Glu  
 20 25 30

Ser

&lt;210&gt; 91

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 91

Gly Pro Phe Lys Arg Cys His Glu Arg Leu Val Ala Phe Ala Arg Cys  
 1 5 10 15

Trp Phe Met Trp Ser Met Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

&lt;210&gt; 92

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 92

Gly Pro Ser Asn Asp Asn Gln Leu Val Leu Arg Val Arg Ile Leu Arg  
 1 5 10 15

Val Leu Ile Val Met Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

&lt;210&gt; 93

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 93

Arg Val Arg Arg Met Arg Leu Leu Val Arg Leu Met Gly Ser Asp Asp  
 1 5 10 15

Ser Gly Thr Ile Pro Asp Phe Gly Pro  
 20 25

&lt;210&gt; 94

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 94

Gly Pro Ser Leu Gln Phe Leu Glu Val Val Val Ser Cys Tyr Met Val  
 1 5 10 15

Leu Tyr Asp Leu Ser Lys Gly Pro  
 20

&lt;210&gt; 95

&lt;211&gt; 34

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 95

Gly Pro Gln Pro Phe Cys Ser Pro Pro Ser Phe Tyr Thr Arg Leu Leu  
 1 5 10 15

Ile Ile Val Arg Leu Leu Ser Leu Asp Leu Gln Arg Ser Ser Asn Arg  
 20 25 30

Arg Tyr

&lt;210&gt; 96

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide



&lt;400&gt; 96

Gly Pro Ala Pro Leu Ser Leu Cys Val Cys Lys Cys Gly Cys Gly His  
 1 5 10 15

Thr Arg Pro Phe Val Gly Pro  
 20

&lt;210&gt; 97

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 97

Gly Pro Asp Val His Ile Trp Gln Ser Ile Ile Phe Tyr Ala Met Arg  
 1 5 10 15

His Met Met Gly Pro  
 20

&lt;210&gt; 98

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 98

Gly Ser Gly Cys Gly Cys Phe Val Arg Gly Arg Ile Val Arg Ile Arg  
 1 5 10 15

Cys Val Ile Leu Leu Leu Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu  
 20 25 30

Ser

&lt;210&gt; 99

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 99

Gly Pro His Ser Ser Ala His Asp Arg Ile Trp Leu Arg Val Arg Gly  
 1 5 10 15

Leu Arg Ile Ile Leu Leu Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

&lt;210&gt; 100

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 100

Gly Ser Gly Leu Cys Val Arg Arg Trp Trp Gly Met Ser Val Gly Ser  
 1 5 10 15

Arg Ile Met Leu Val Met Leu Val Leu Arg Ser Ala Glu Ile Tyr Glu  
 20 25 30

Ser

&lt;210&gt; 101

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 101

Gly Pro Val Tyr Ser Glu Ala Phe Val Cys Leu Val Cys Ala Gly Val  
 1 5 10 15

Cys Val Glu Glu Cys Gly Gly Ser Leu Asp Leu Gln Arg Ser Ser Asn  
 20 25 30

Arg Arg Tyr  
 35

&lt;210&gt; 102

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 102

Gly	Pro	Ile	Glu	Thr	Val	Gly	Phe	Ile	Val	Arg	Leu	His	Thr	Leu	Leu
1				5					10					15	

Met	Val	Leu	Arg	Arg	Thr	Gly	Pro
							20

&lt;210&gt; 103

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 103

Gly	Pro	Leu	His	Arg	Thr	Leu	Leu	Val	Asp	Met	Cys	Cys	Trp	Leu	Met
1				5					10					15	

Ser	Leu	Glu	Ser	Asn	Met	Gly	Pro
							20

&lt;210&gt; 104

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 104

Gly	Val	Arg	Val	Val	Cys	Val	Val	Arg	Ser	Leu	Phe	Val	Leu	Arg	Cys
1				5					10					15	

Gly	Leu	Leu	Arg	Cys	Arg	Gly	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu
			20					25						30	

Ser

&lt;210&gt; 105

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 105

Val	Arg	Glu	Cys	Ser	Leu	Cys	Arg	Val	Met	Val	Leu	Met	Phe	Val	Leu
1				5					10					15	

Arg	Gly	Ile	Arg	Leu	Arg	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu	Ser
			20					25					30		

&lt;210&gt; 106

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 106

Gly	Val	Arg	Leu	Leu	Val	Leu	Leu	Arg	Leu	Arg	Cys	Val	Arg	Arg	Gly
1				5					10					15	

Gly	Gly	Cys	Phe	Val	Cys	Trp	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu
			20					25					30		

Ser

&lt;210&gt; 107

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 107

Gly	Ser	Gly	Phe	Arg	Met	Arg	Val	Leu	Val	Met	Val	Cys	Arg	Leu	Arg
1				5					10					15	

Val	Val	Phe	Leu	Val	Arg	Arg	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu
			20					25					30		

Ser

<210> 108  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 108  
 Gly Arg Leu Gly Trp Leu Arg Leu Leu Cys Val Arg Ile Val Leu Val  
 1 5 10 15

Cys Leu Arg Arg Gly Leu Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

<210> 109  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 109  
 Gly Ser Gly Trp Tyr Val Asp Leu Gly Asp Tyr Ser Val Trp Val Asp  
 1 5 10 15

Tyr Val Tyr Cys Gly Ser Gly Ser Leu Asp Leu Gln Arg Ser Ser Asn  
 20 25 30

Arg Arg Tyr  
 35

<210> 110  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 110  
 Gly Pro Ser Gln Cys Ala Gln Arg Val Ala Leu Ile Gln Met Tyr Ile  
 1 5 10 15

Asp Ala Leu Val Cys Ile Gly Pro  
 20

<210> 111  
 <211> 25  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 111  
 Gly Ser Gly Cys Val Arg Ile Arg Val Gly Ile Val Arg Arg Met Leu  
 1 5 10 15

Phe Leu Arg Phe Val Phe Leu Val Pro  
 20 25

<210> 112  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 112  
 Gly Pro Leu Leu Asp Pro Met Leu Arg Gln Arg Phe Ser Leu Arg Val  
 1 5 10 15

Trp Ile Met Leu Leu Gly Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

<210> 113  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 113  
 Gly Pro Asn Ser Trp Val Trp Arg Tyr Val Thr Ile Ala His Trp Leu  
 1 5 10 15

Ala Asn Tyr Arg Met Ser Gly Pro  
 20

<210> 114  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 114

Gly	Pro	Ala	Met	Lys	Ser	Cys	Thr	Ile	Arg	Val	Phe	Arg	Val	Cys	Ile
1				5				10						15	

Val	Leu	Arg	Ile	Val	Arg	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu	Ser
			20					25					30		

&lt;210&gt; 115

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 115

Gly	Val	Arg	Met	Arg	Leu	Met	Ile	Arg	Ile	Phe	Arg	Gly	Leu	Phe	Val
1				5				10						15	

Leu	Arg	Gly	Phe	Arg	Gly	Leu	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu
			20					25					30		

Ser

&lt;210&gt; 116

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 116

Gly	Pro	Val	Pro	Ser	Ser	Pro	Cys	Ser	Phe	Leu	Leu	Tyr	Cys	Arg	Asp
1				5				10						15	

Val	Leu	Cys	His	Trp	Pro	Gly	Pro
			20				

&lt;210&gt; 117

&lt;211&gt; 34

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 117

Gly	Pro	Cys	Glu	Pro	Phe	Ile	Gly	Asp	Cys	Trp	Pro	Cys	Leu	Ile	Arg
1				5				10					15		

Thr	Leu	Val	Thr	Leu	Arg	Gly	Leu	Asp	Leu	Gln	Arg	Ser	Ser	Asn	Arg
			20					25					30		

Arg Tyr

&lt;210&gt; 118

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;400&gt; 118

Gly	Pro	Trp	Trp	Lys	Asp	Arg	Gly	Val	Leu	Val	Arg	Leu	Cys	Val	Leu
1				5				10					15		

Arg	Leu	Val	Val	Gly	Val	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu	Ser
			20					25					30		

&lt;210&gt; 119

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Synthetic peptide

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (18)

&lt;223&gt; Variable amino acid

&lt;400&gt; 119

Gly	Pro	Arg	Leu	Leu	Val	Arg	Met	Arg	Gly	Trp	Cys	Arg	Val	Ser	Leu
1				5					10				15		

Ile	Xaa	Phe	Trp	Leu	Arg	Val	Leu	Arg	Ser	Ala	Glu	Ile	Tyr	Glu	Ser
			20					25					30		



<210> 120  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 120  
 Arg Val Arg Ile Ile Val Val Ser Leu Arg Ile Trp Arg Leu Leu Val  
 1 5 10 15

Arg Arg Arg Cys Leu Cys Leu Val Leu Arg Ser Ala Glu Ile Tyr Glu  
 20 25 30

Ser

<210> 121  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 121  
 Gly Pro Val Glu Cys Ala Asp Val Leu Phe Ala Ser Arg Ile Arg Leu  
 1 5 10 15

Leu Cys Leu Cys Phe Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

<210> 122  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 122  
 Gly Arg Arg Leu Leu Val Phe Arg Leu Ser Val Phe Val Val Leu  
 1 5 10 15

Gly Arg Arg Leu Ser Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

<210> 123  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 123  
 Gly Ala Gly Leu Gly Arg Val Ile Arg Leu Arg Ile Val Val Leu Arg  
 1 5 10 15

Cys Ile Phe Leu Leu Phe Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu  
 20 25 30

Ser

<210> 124  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 124  
 Gly Pro Phe Pro Phe Asp Tyr Pro Arg Trp Ile Met Ile Val Leu Leu  
 1 5 10 15

Arg Gly Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25

<210> 125  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 125  
 Gly Ser Arg Gly Leu Arg Leu Cys Leu Leu Gly Arg Cys Arg Leu Cys  
 1 5 10 15

Gly Cys Leu Ile Ile Met Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu  
 20 25 30

Ser

<210> 126  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 126  
 Gly Pro Glu Ser Tyr Val Leu Trp Pro Ala Arg Gly Glu Ala Leu Tyr  
 1 5 10 15

Tyr Leu Arg Ala Trp Leu Gly Pro  
 20

<210> 127  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 127  
 Gly Ser Arg Cys Ile Arg Arg Arg Ile Ser Ile Leu Phe Phe Val Phe  
 1 5 10 15

Arg Val Leu Arg Ser Arg Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu  
 20 25 30

Ser

<210> 128  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 128  
 Gly Pro Phe Ser Glu His Ala Arg Gly His Val Val Thr Ile Cys Arg  
 1 5 10 15

Leu Arg Leu Leu Phe Trp Leu Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
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<210> 129  
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<220>  
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           peptide

<400> 129  
 Gly Pro Ser Ser Leu Leu Arg Arg Cys Leu Ile Leu Gly Met Val Leu  
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Gly Val Leu Arg Arg Arg Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
                   20                                  25                                  30

<210> 130  
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 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           peptide

<400> 130  
 Gly Pro His Pro Val Leu Ala Val Gln Leu Ile Asn Ala Tyr Leu Gly  
 1                  5                                  10                                  15

Leu Glu Arg Val Gly Arg Gly Pro  
                   20

<210> 131  
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           peptide

<400> 131  
 Gly Pro Leu Pro Ser Gly Ala Val Ser Thr Glu Ala Tyr Phe Trp Glu  
 1                  5                                  10                                  15

Val Phe Lys Leu Leu Met Gly Pro  
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<210> 132  
 <211> 32  
 <212> PRT  
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<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 132  
 Gly Pro Tyr Pro Tyr Leu Arg Ile Leu Leu Val Gln Lys Ile Ala Cys  
 1 5 10 15

Val Arg Arg Ala Leu Trp Val Leu Arg Ser Ala Glu Ile Tyr Glu Ser  
 20 25 30

<210> 133  
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<220>  
 <223> Description of Artificial Sequence: Synthetic  
 peptide

<400> 133  
 Ala Glu Ile Tyr Glu Ser  
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